

Accessibility Requirements at Sandia National Laboratories New Mexico

Architectural Accessibility Review Board

Introduction

The Architectural Department at Sandia National Laboratories, New Mexico (SNL/NM) is constantly striving to make the SNL campus accessible and barrier free for all employees and visitors. The Architectural Accessibility Review Board (AARB) at SNL/NM is a newly formed committee dedicated to meet all of the legal constraints and requirements for federally funded projects. The AARB will be the decision making authority on all accessibility issues that are not clearly defined in the accessibility guidelines and will give guidance to all parties that provide services related to architectural, engineering, construction and inspection for SNL/NM. The accessibility standard that SNL/NM will follow is the ADA and ABA Accessibility Guidelines for Buildings and Facilities (ADA/ABA AGBF) published in the Federal Register on July 23, 2004 and amended August 5, 2005. SNL/NM primary focus is on Part II: ABA Application and Scoping as stated in the preamble. "The ABA covers facilities that are designed, built, altered, or leased with Federal funds." The AARB is also providing this document for design and construction guidance illustrating unique situations and accessories specific to SNL/NM that need to be followed for all projects. The AARB welcomes all suggestions and comments from the architectural, engineering, construction and inspection community that will help improve accessibility and this document for SNL/NM.

All projects at SNL/NM need to follow the priority list below to meet the minimum requirements for accessibility. This list provides a thought process and considerations when a new project is in the planning phase of design. Planning, design and construction professionals are encouraged to use this list as a checklist when scoping a new project and defining the budget.

1. Accessible Parking: Always look for the minimum required accessible parking spaces within close proximity to the building and guidance from SNL/NM Traffic Engineering as part of Infrastructure Engineering. Otherwise, include the design and construction cost for accessible parking in the project scoping budget. If a building component is being modified or made accessible, then parking needs to meet accessibility requirements.

2. Accessible Route from parking and bus stop to the main building entrance: Always make sure the sidewalks and pathways from parking and bus stops meet SNL/NM accessibility requirements. If a building component is being modified or made accessible, then sidewalks and pathways need to meet accessibility requirements. Include design and construction costs in the project scoping budget for this situation if the sidewalks and pathways do not meet accessibility requirements. See SNL/NM Infrastructure Engineering for design and construction guidance.

3. Accessible Main Building Entrance: The main building entrance needs to comply with the accessibility requirements for ingress and egress if a building component is being modified or made accessible. The main entrance needs to be off a main sidewalk or pathway. The AARB also supports the installation of automatic door operators at the main entrance of all new buildings and existing buildings where a major modification is planned. Include design and construction costs in the project scoping budget if the main building entrance is out of compliance or automatic door operators are being installed.

4. Accessible Routes through the building: If a building component is being modified or made accessible, then the routes to the modified area need to be in compliance. This includes elevators, stairs and ramps. Include design and construction costs in the project scoping budget if the routes need to be modified for compliance.

5. Accessible Restrooms: At least one main restroom per gender per floor shall meet the accessibility requirements when modified. The AARB may have to provide an interpretation on what constitutes a modification to a restroom during the scoping phase of a project.

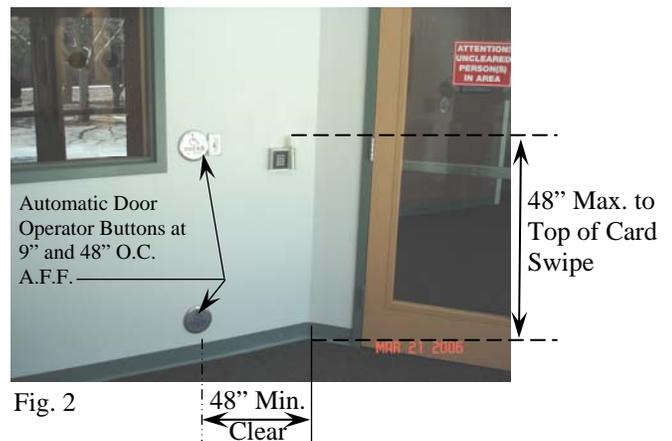
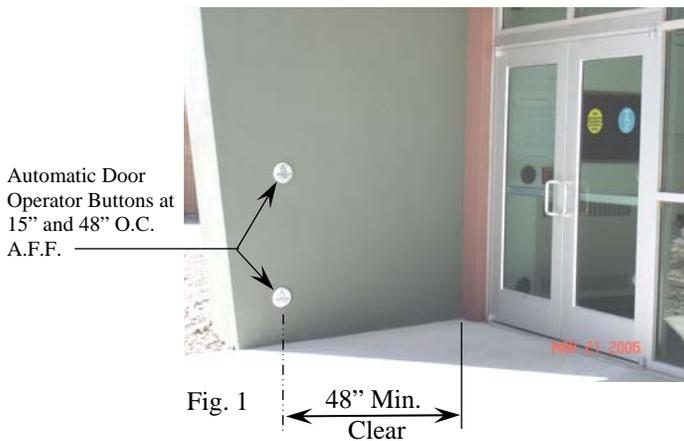
6. Accessible Egress from a building: The AARB is requiring that all life safety required egress stairs; ramps, door and routes through and out of a new building meet the accessibility requirements. If an existing building component is being modified or made accessible, then the routes from the modified component and exits shall comply with accessibility guidelines. Include design and construction costs in the project scoping budget if the routes and exits need to be modified for compliance.

Using Common Sense during the Project Scoping Phase: Remember, it makes no sense to upgrade a restroom in a building to meet the accessibility requirements when the parking lot spaces, routes to the building, building entrances and existing restroom door openings are out of compliance. Include all of these modifications in the project scoping budget when you modify a building space like a restroom or a building component like a doorway.

A Message from the AARB: This is a living document that illustrates the unique accessibility issues at SNL/NM. The AARB welcomes any new or innovative ideas to help improve site and building accessibility at Sandia National Laboratories. Use the ADA and ABA Accessibility Guidelines as the standard for common practice and the AARB as the decision making authority for SNL/NM. An early collaborative effort will produce the best outcome on all of your projects.

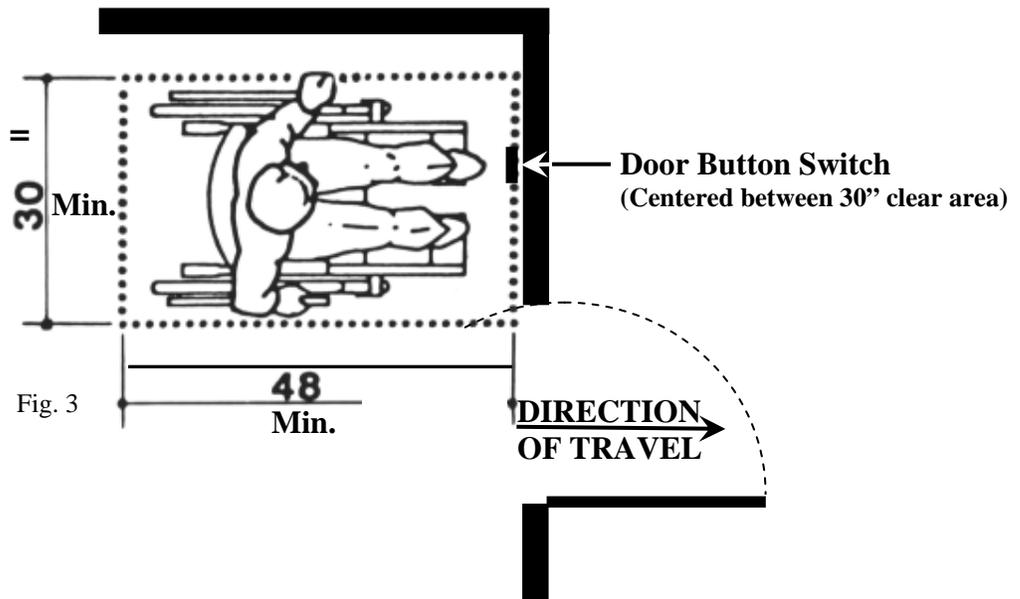
BUILDING INGRESS & EGRESS

Automatic Door Operator Button Placement



Ingress into a Building

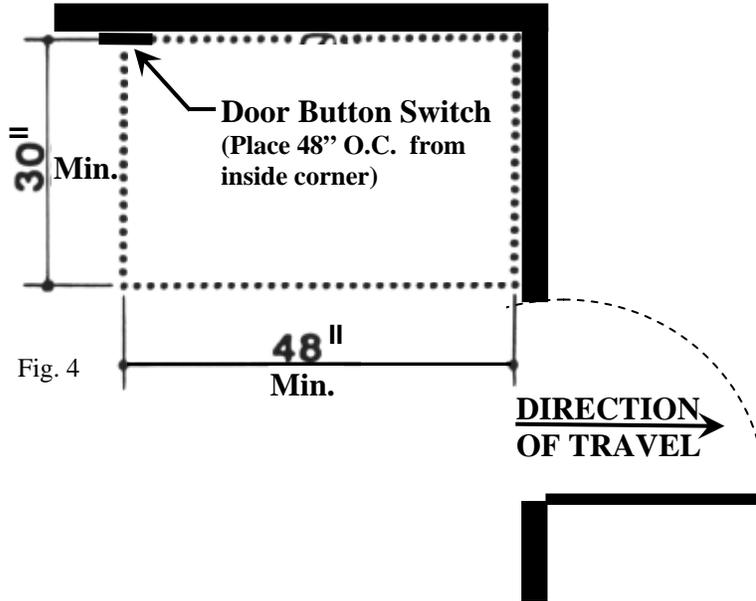
Always allow enough room for ingress & egress when placing door operator switches especially during the rough-in stage of construction. The SNL AARB prefers 48" minimum and 60" maximum from perpendicular obstruction or door opening. When an access control card swipe is use in conjunction with an automatic door operator, then the card swipe needs to be placed in close proximity and in front of the operator button. This will allow the card to be swiped first and then the button can be pushed for accessibility. Note that all card swipes need to be mounted no higher than 48" from finished floor to the top of the swipe access port.



Egress out of a Building

Option 1. Single Outward Swinging Door, Front Approach

Center the button switch between the 30 inches dimension and maintain 30 inch clear area between the door jamb and the adjacent wall. No other obstruction shall be allowed to encroach within the accessible clear area.

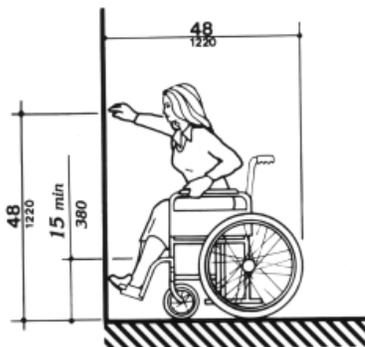


Option 2. Single Outward Swinging Door, Side Approach

Place Button 48 inches from the corner and maintain the 30"x 48" clear area between the door jamb and the wall for wheelchair maneuverability.

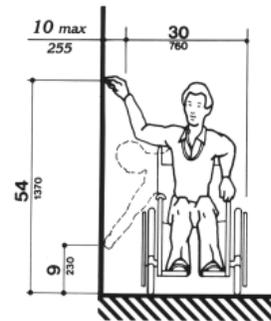
Mounting Heights of Automatic Door Operator Buttons

Place the lower button at 9" min. or 15" min. o.c. above finished floor depending on the main approach direction. Place the upper button at 48" max. o.c. above finished floor for any approach. The 48" above finished floor will be the standard height for both front and side approach on all automatic door operators, upper button switches since it meets both the front and side approach requirements.



FRONT APPROACH & REACH

Note:
Place all upper automatic door operator buttons at 48" A.F.F.



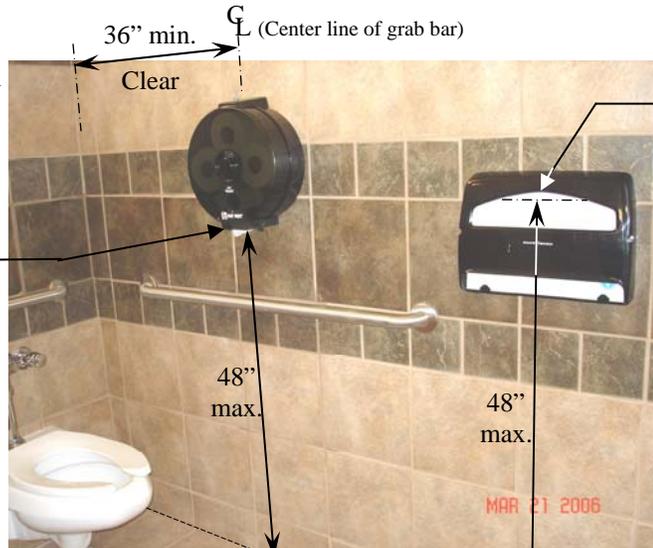
SIDE APPROACH & REACH

BUILDING RESTROOMS

Restroom and Accessories at SNL/NM

Sandia uses high volume paper dispensing units on most of the toilet room accessories. Since these dispensers are surface mounted and larger than normal, special care in locating and mounting must be employed in order to meet the minimum accessible areas around sinks and toilets.

High volume toilet paper roll dispenser shall be centered above the side grab bar and at 48" max. above finished floor to the roll dispensers outlet point



Locate seat protector dispenser beyond and above the side grab bar and at 48" max. above finished floor to the dispenser outlet point

Fig. 7

Accessible Toilet Paper and Seat Protector Dispensers

Always allow enough room around the toilet area for persons with disabilities. Mount toilet room accessories out of hard to reach or cumbersome areas. Avoid placing mega roll toilet paper dispensers below the grab bar or within the allowable leg and knee spaces below the grab bars. Do not place any dispenser unit directly behind the toilet. These areas are not accessible to users.

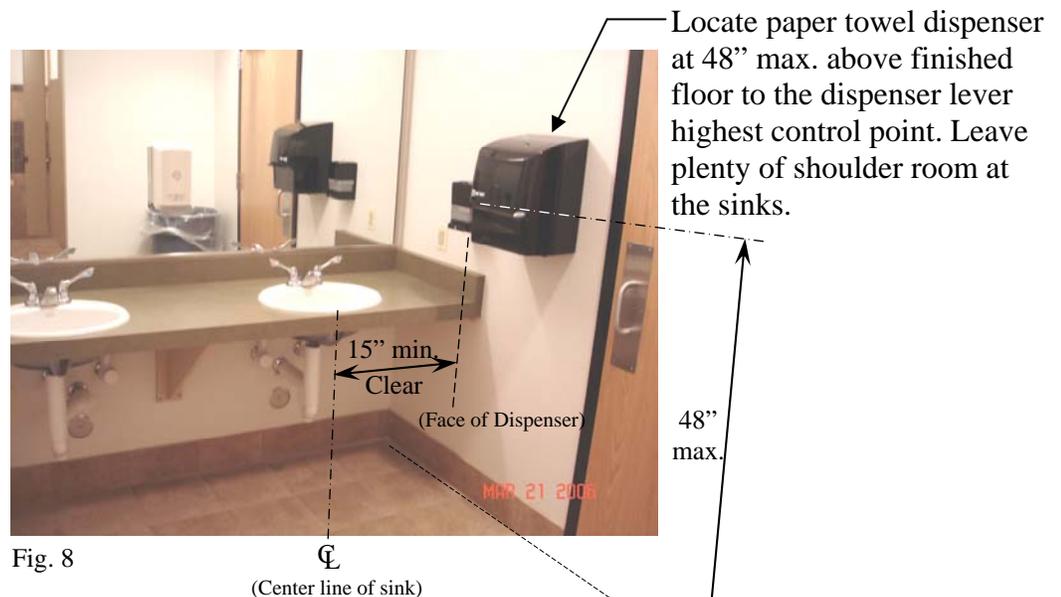


Fig. 8

Locate paper towel dispenser at 48" max. above finished floor to the dispenser lever highest control point. Leave plenty of shoulder room at the sinks.

Accessible Paper Towel Dispensers

Mount the paper towel dispenser in an accessible area to allow for shoulder room at the sink and avoid obstructing the required clear door area.

Mount the soap dispenser away from the back wall at greater than one-half the width of the countertop or more for side wall applications

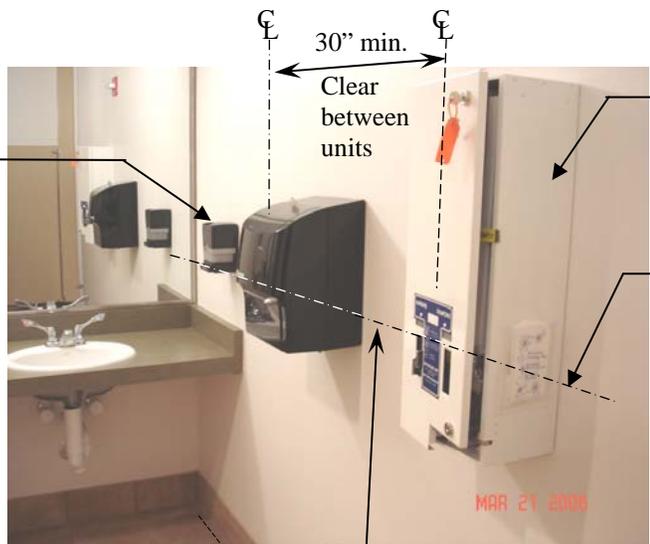


Fig. 9

Sanitary Napkin Dispenser

Locate other dispenser type units at 48" max. above finished floor to the dispenser lever highest control or access point.

48" max.

Mount soap dispensers that are located more than one-half the width of the countertop or at the back wall of the countertop at 44" above finished floor to the soap lever control for back wall applications

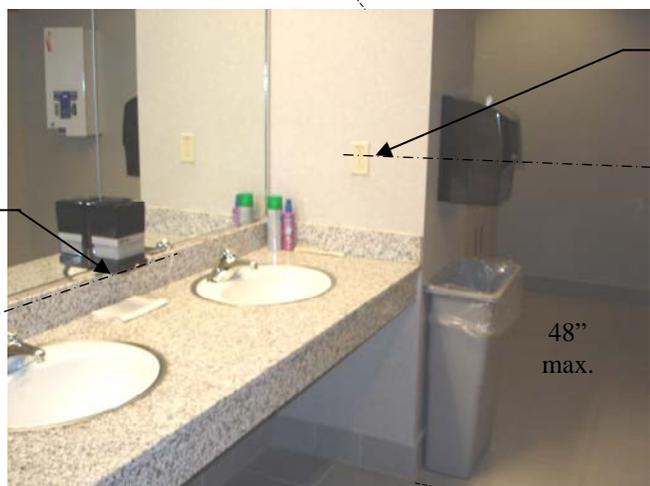


Fig. 10

Locate GFI outlets at 48" max. above finished floor to the center of the outlet when mounted more than one-half the width of the countertop and 44" A.F.F to the center of the outlet when mounted less than one-half the width of the countertop towards or at the back wall.

48" max.

Other Wall Mounted Dispenser Type Units

Mount all other dispenser units in an accessible area to allow for shoulder room between units and avoid obstructing the required clear areas around sinks, doors and passageways.

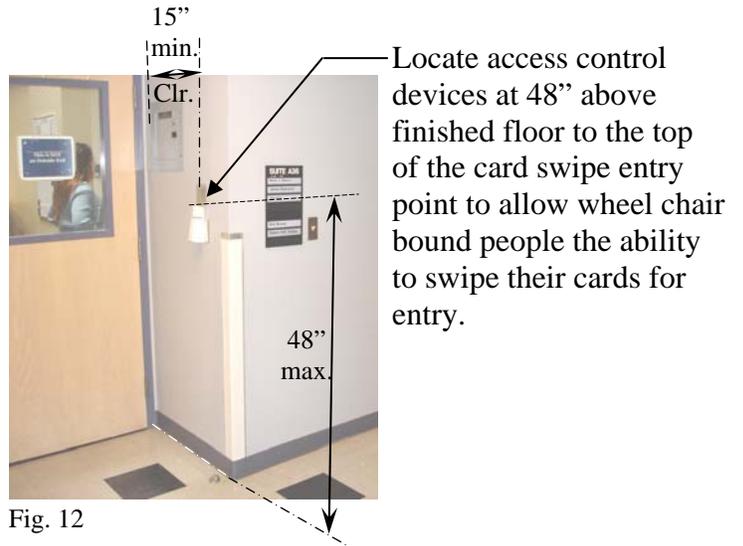
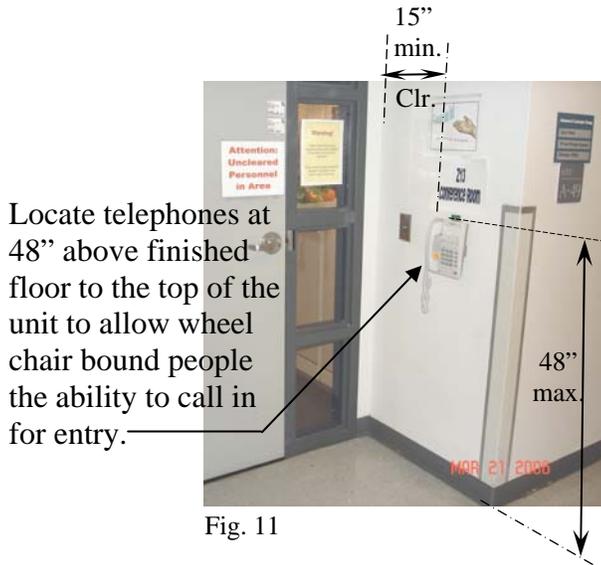
Accessible Shower Designs and Installations

Showers at SNL need to have a smooth floor transition from the dressing area. Whenever possible, try to make the shower floor an integral part of the dressing area. Always provide a way for water to drain in the dressing areas to avoid a slipping hazard. Try to make the showers and dressing areas more private and larger than the minimum requirement to allow for better wheelchair maneuverability. Also provide a bench for accessible seating and a shelf for personal items in all dressing areas.

BUILDING INTERIOR

Telephones and Access Control Devices at SNL/NM

Telephones and access control devices outside of office and lab spaces need to comply with accessibility laws. Architects, Engineers, Inspectors, Electrical and Communication Contractors need to pay close attention to the mounting heights of J-boxes during the rough-in phase of a construction project.



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